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EXAMINER
CLEVELAND, MICHAEL B

ART UNIT	PAPER NUMBER
1762	11

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/699,396	BAYYA ET AL.
	Examiner	Art Unit
	Michael Cleveland	1762

-- The MAILING DATE of this communication appears on th cover sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 August 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-8 and 10-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-8 and 10-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 September 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Specification

1. The previous objections to the specification are withdrawn in view of Applicant's amendments and remarks.

The amendment filed 8/15/2002 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: In the paragraph at p. 9, line 3, there is no support for the breadth of the term "particles made from the coating material" because the originally filed disclosure states "particles made *of* the coating material" (emphasis added by examiner). In the paragraph at p. 14, line 10, there is no support for the new phrase that reaction may take place when the precursor solution is sprayed because the statement originally states that reaction may take place when the precursor solution is *formed*. (emphasis added by examiner).

Applicant is required to cancel the new matter in the reply to this Office Action.

Drawings

2. The corrected or substitute drawings were received on 9/28/2001. These drawings are approved.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 3-8, and 10-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 3, and 13-15: The scope of the claim element "coating material" is unclear. Is it inclusive or exclusive of the precursor? Applicant argues that it excludes the precursor, and appears to argue that the language expressly states "that the coating material is formed from the precursor". The examiner disagrees that such language excludes the precursor from being the coating material. In fact, the immediate impression on the examiner is that the claim explicitly

states that the coating material is the precursor material. (However, the context of the specification clearly demonstrates that the coating material may be formed from the precursor material via reaction.) Further, dependent claim 10 reveals that both the coating material and the precursor may be sodium phosphate (as argued by Applicant on p. 10 of the reply). Thus, "coating material" appears to be inclusive of "precursor". However, in such a case, it is unclear how Applicant keeps the precursor from contacting the particles before spraying as claimed in claim 14.

Claims 5 and 16-17: The basis of the dilution ratio is unclear because it is unaccompanied by units. Applicant's solution to this problem in the amendment to claim 4 appears to be supported by p. 11, lines 15-21. Similar amendments would resolve the issue in claims 5 and 16-17.

Claims 4-5 and 16-17: The limitation as to the particle velocity is unclear. As indicated by Masters, the droplet velocity may be measured in any direction (See pp. 286 and 288). Therefore the claimed velocities are unclear because they do not specify a direction in addition to a magnitude.

Claim 13: The phrase "to improve the integrity of the coating material" is unclear. Applicant provides no definition of the phrase in the specification, and the phrase is not recognized in the art. The phrase has been interpreted as at least inclusive of reacting a precursor to form an oxide with desired properties.

Claims 6-8, 10-12, and 18-19 are rejected primarily as containing the flaws of the parent claims.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 14 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the formation of metal oxide coatings from metal oxide precursors without depositing metal oxides before spray drying, does not reasonably provide enablement for depositing a precursor by spray drying where the final coating material is the same as the precursor material without the precursor material contacting the substrate particles in the slurry.

The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. The specification does not enable one of ordinary skill in the art to add particles to a solution of a coating material (e.g., sodium phosphate) without the coating material contacting the particles.

7. Claims 1, 3-8, and 11-19 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the formation of metal oxide coatings from metal precursors and the formation of coatings without reaction, does not reasonably provide enablement for the formation of organic coatings. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. Applicant's disclosure and Examples are limited to the formation of oxide coatings formed by reacting metal-containing precursors, but Applicant effectively claims any reaction to form any material from any other material. There is no guidance for the practice of the formation of other coatings than oxides (e.g., reaction to form organic coatings) without undue experimentation.

8. Claim 20 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the formation of indium tin oxide, silicon oxide, magnesium oxide, or yttrium-europium oxide using the claimed precursors, does not reasonably provide enablement for forming sodium phosphate from the claimed precursors. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. Claim 20 requires the use of a precursor containing In, Sn, Si, Mg, Y, and/or Eu. There is no explanation of how to use a precursor of a metal without including that metal in the compound. sodium phosphate compound

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1 and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Petersen (U.S. Patent 5,747,100, hereafter '100).

'100 teaches

(a) preparing a liquid precursor coating solution by adding solid particles to a liquid coating solution to form a liquid coating slurry (col. 6, lines 41-45) containing a coating precursor (e.g., salts of Zn, Ga, and Gd), dissolved in water (a solvent for the precursor) (col. 6, lines 23-37) and the solid particles (col. 6, lines 41-45);

(b), (c) spray drying (i.e., spraying the slurry to form at least some droplets that contain at least one particle and passing the droplets through a zone where the droplets are dried) to form particles coated with a coating material (col. 6, lines 45-47). There is no indication that the precursor is precipitated until after spraying;

(d) heat treating the coating material to react the precursors to form a final coating material (col. 6, lines 50-62). The step must inherently remove any remaining solvent, as well as the reaction byproducts that do not form part of the oxide coating.

Claim 13: Step (a), above, may be performed by (a1) preparing a liquid precursor solution by dissolving a coating precursor in a liquid precursor solvent (col. 6, lines 23-33), (b1) mixing the precursor solution with urea (a diluent miscible with water) (col. 6, lines 33-37), and (c1) adding the phosphor particles (col. 6, lines 41-45). The heat treatment causes crystallization to for an electrically conducting film (col. 6, lines 60-62). Therefore, it appears to necessarily improve the integrity of the coating material.

Claim 14: As far as the claim is understood, it appears to be anticipated because the formation of the final coating material does not occur until after the particles have been coated by spray drying.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 1, 3 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen '100 in view of Strom et al. (U.S. Patent 5,087,607, hereafter '607), Anderson et al. (U.S. patent 5,800,922), and Okabe et al. (U.S. Patent 5,609,911, hereafter '911).

'100 is discussed above, and uses precursors such as metal nitrates (col. 6, lines 25-30) but does not explicitly state that precipitation is avoided until after spraying.

Strom '607 teaches a similar method in which particles of metal oxides are prepared from metal-containing precursors, such as metal nitrates (Examples) and that precipitation is avoided in the solution before spray drying (col. 21, lines 38-42). However, '607 does not discuss why precipitation is avoided.

In the background of Okabe '911, limitations of spray drying processes are discussed. '911 warns that in spray drying processes, coating uniformity may be adversely affected by gellation (col. 1, lines 35-39 and col. 1, line 65-col. 2, line 4). Also, '922 warns that gellation of spray drying compositions may render the composition unpumpable (and therefore unfit for spraying) (col. 2, lines 13-30).

Therefore, taking the references as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have prevented any gellation or precipitation (e.g., via the precipitation-preventing method of '607) in the slurry of '100 before spray drying in order to have avoided destroying the flow properties of the solution, and in order to have produced a more uniform coating for the reasons taught by '911, and '922.

Claim 13: Precipitation may be accomplished by adding nitric acid, a diluent miscible with water, the precursor solvent (col. 21, lines 31-42).

Claim 3: '100 (col. 6, lines 25-30) and '607 (Examples) each teach the use of nitrate precursors. '607 teaches compositions may be spray dried at a relatively low temperature (e.g., 75-105 °C, as shown in the Examples) and then fully converted to oxides at higher temperatures (e.g., 750-1000 °C) that further drive off volatile ligands (col. 9, lines 5-59 and col. 15, lines 3-21).

13. Claims 3-8, 12, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson '100 in view of Masters (Spray Drying Handbook, 4th edn.; John Wiley & Sons, New York, 1985 (TP 363.M38), hereafter Masters).

Claims 3 and 15: '100 is discussed above. It further teaches that the precursors may be nitrates (col. 6, lines 23-28). It does not teach that the spray drying occurs by spraying into a zone with an elevated temperature that is less than the reaction temperature.

However, spray drying is typically performed by spraying into a heated atmosphere, wherein the application of heat aids the drying process (Masters, p. 3). Typical temperatures for the spraying zone are in the range of 90-125 °C (Masters, p. 30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have spray dried the particles of '100 into a heated zone at a temperature of 90-125 °C because Masters teaches that such heating aids in drying the particles, and teaches that such temperatures are operative for spray drying. These temperatures are lower than the disclosed reaction (i.e., heat treatment) temperatures of 300-1000 °C disclosed by '100 (col. 6, lines 45-62).

Claims 4-5, 7, 16-18: '100 teaches a particle size (i.e., diameter of 3-10 microns) (col. 6, lines 47-50) and a thickness of less than 1 micron (1000 nm) (col. 6, lines 47-50). The subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a *prima facie* case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549.

'100 does not teach particular dilution ratios, droplet velocities, or residence times for the spray drying process. However, the concentration of feed solids (i.e., the dilution ratio) is known to affect the coarseness of the spray, evaporation characteristics, and bulk density (Masters, p. 54). Likewise, the droplet velocity affects droplet size (Masters, pp. 54, 179, 213, 273-292). Residence time is known to affect the degree of moisture removal (Masters p. 55, 145-147, 151, 320-333). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized these variable through routine experimentation to have achieved desired droplet sizes and degrees of moisture removal because the determination of optimum or workable ranges of result-effective variables, such as these, represents mere routine experimentation to one of ordinary skill in the art. See MPEP 2144.05.II. and the cases listed therein.

Claims 5 and 17: As stated above, spray drying temperatures of 90-125 °C are common in the art (Masters, p.30). The subject matter as a whole would have been obvious to one of

ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a *prima facie* case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549.

Claim 6: The precursor material is mixed with urea, a water-soluble material (i.e., a material miscible with the solution) ('100, col. 6, lines 33-35).

Claims 7-8, 18-19: The particles to be coated are phosphors ('100, col. 5, lines 23-34). The reaction temperature is 300-1000 °C, and the reaction time is less than 5 hours ('100, col. 6, lines 45-62). The subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a *prima facie* case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549.

Claim 12: The coating (30) may be further coated (Fig. 3; col. 8, lines 1-40).

Claim 19: The coating is inorganic (col. 6, lines 56-57).

14. Claims 3-8, 12, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson '100, Strom et al. '607, Anderson '922, and Okabe '911, as applied to claims 1 and 13 and further in view of Masters for substantially the same reasons discussed above. Note also the teachings of '100, already discussed above, regarding spray drying temperatures and nitric acid as a diluent.

15. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson '100 in view of Masters as applied to claims 8 and 13 above, and further in view of Hanneman (U.S. Patent 5,063,267, hereafter '267) and Chau (U.S. Patent 5,196,229, hereafter '229).

'100 and Masters are described above for the formation of an oxide coatings, as described in col. 6. However, '100 also teaches the formation of other oxide coatings (cols. 7-8). In particular, diffusion barriers prepared from a solution containing "ethyl silicate" by substantially the same method as the oxide coating process is described (col. 7, lines 1-34).

The teaching does not clearly indicate the diffusion barrier is formed from silicon oxide, nor that tetraethyl orthosilicate is the particular ethyl silicate precursor used. However, one of ordinary skill in the art would have understood that '100 describes a decomposition reaction to form a silica film because the context of '100 is the decomposition of metal precursor

compounds to form metal oxide coatings on particles (See above.), because the formation of silica barriers via decomposition of silica precursors is well known in the art (See, for instance, '267; col. 8, lines 28-54 and col. 10, lines 21-27), and because the formation of silica films by decomposition of ethyl silicates (in particular, tetraethyl orthosilicate (TEOS)) is known (See, for instance, '229, Example 1). Therefore, taking the references as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used TEOS as the particular "ethyl silicate" of '100 to have formed a silica diffusion barrier coating because '267 teaches that silica is a useful diffusion barrier material and because '229 teaches that TEOS decomposes to form silica at temperatures within the disclosed treatment range of '100, col. 7, lines 6-10.

16. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson '100, Strom '607, Anderson '922, Okabe '911 and Masters, as applied to claims 1 and 13, above, and further in view of Hanneman '267 and Chau '229 for substantially the same reasons discussed above.

17. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson '100, Masters, Hanneman '267, and Chau '229 as applied to claim 10, above, and further in view of Ohoshi et al. (U.S. Patent 5,949,184, hereafter '184).

'100, Masters, '267, and '229 are described above, but do not explicitly teach that the phosphor is ZnS:Ag,Cl. However, '100 seeks to form phosphors for use in field emission displays (FEDs) (col. 1).

'184 teaches that fluorescent films of FEDs (col. 1, lines 1-10) may be formed from phosphors such as ZnS:Ag,Cl (col. 9, lines 38-51). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used ZnS:Ag,Cl as the particular phosphor of '100 with a reasonable expectation of success because '184 teaches that ZnS:Ag,Cl is a suitable FED phosphor.

18. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson '100, Strom et al. '607, Anderson '922, Okabe '911, Masters, Hanneman '267, and Chau '229 as applied to claim 10, above, and further in view of Ohoshi '184 for substantially the same reasons discussed above.

Response to Arguments

19. Applicant's arguments filed 8/15/2002 have been fully considered but they are not persuasive.

Rejections under 35 USC 112, 2nd paragraph: The rejections based on the limitation of removing volatile material during the heat treatment step are withdrawn in view of Applicant's remarks and reconsideration of the disclosure (especially at p. 14, lines 17-20).

The scope of the term "coating material" has been discussed above.

Applicant remarks that on p. 3, line 8, "the Examiner has incorrectly noted that the precursor is heated and is thus decomposed". Applicant has not explained why the interpretation is incorrect. In the present action, the examiner has attempted to characterize the conversion of metal precursors to metal oxides as "reaction" rather than "decomposition", but considers that the phrases "conversion of metal precursors to metal oxides", "reaction of metal precursors to metal oxides" and "decomposition of metal precursors to metal oxides" to be exactly identical in meaning.

Regarding claims 4-5 and 16-17: Applicant does not argue the rejection but indicates willingness to modify the claims to overcome the rejection. As to dilution ratio, Applicant's amendment to claim 4 has resolved the issue, and the examiner recommends similar amendments to claims 5, 16, and 17. As to velocity, the examiner has no such recommendation.

The rejections based on the discrepancies between claims 3 and 10 are withdrawn in view of Applicant's amendment to claim 3.

Regarding claim 13, Applicant argues that the amendment and discussion in the Interview overcomes the rejections. Applicant's amendment resolves the issue regarding "the precursor(s)". However, the amendment does not address the limitations "electrically conducting crystalline" or "to improve the integrity of the coating material". Upon reconsidering the record, including the interview summary, there is no indication of resolution of these issues. However, upon reconsidering the claims, it appears that the proper interpretation of "electrically conducting crystalline" is in the following context: "...to convert the coating material from [an] electrically non-conducting amorphous [material] to [an] electrically conducting crystalline [material]...", and the claim has been so treated. However, the term "to improve the integrity of the coating material" remains unclear, especially given that the claim does not define what the

improvement is compared to, and the specification and prior art do not reasonably define "integrity".

Applicant's amendment resolves the issue surrounding regarding the dependency of claim 14.

35 USC 112, 1st paragraph: Regarding claims 2-12 and 14, Applicant argues that the precursor is not prevented from contacting the particles. The rejection as to this issue is withdrawn for claims 2-12 because claim 2 has been canceled. Regarding claim 14, the argument is unconvincing. For the embodiments embraced by the claims wherein the precursor is the coating material, claim 14 appears to preclude any contact between the precursor and the particle. Based on the thrust of the interview and the prior art arguments, it appears that the intent of original claims 2 and 14 is represented by the new limitation of claims 1 and 13: "whereby the precursor is not precipitated until after spraying". Applicant may wish to cancel claim 14 if the intended concept has already been included in the independent claim.

Applicant argues that formation of other coatings than oxides from precursors is well known and is prior art. The argument is unconvincing because it is unsupported by evidence demonstrating such prior art.

Applicant argues that the limitation of claim 20 is possible because sodium phosphate may dissolve to sodium and phosphate ions, and recombine on drying. The argument does not address the rejection (although the amendment requires a shift in focus of the rejection). The rejection is based on the fact that claims 20 lists six precursors at least one of which must be used. None of these precursors includes sodium. Therefore, even though the amendment has opened the language to allow the inclusion of other precursors than those listed in the precursor solution, the amendment still does not explain how applicant prevents the metal from any of the required precursors from remaining as part of the pure sodium phosphate coating. Applicant's discussion of claim 10 is noted. However, unlike claim 20, claim 10 allows the choice of sodium phosphate both as the coating material and the precursor. The issue could be simply resolved by including sodium phosphate in the list of precursors in claim 20.

Claim objections: The objections to the claims have been resolved by the amendment.

Rejections under 35 USC 102(b) and 103:

Applicant argues that the particles of Peterson have a coating already deposited on them before spray drying. The argument is unconvincing because it is unsupported by evidence. Peterson is silent as to precipitation. While it does not disclose that precipitation is avoided before spray drying, it also does not disclose that any precipitation occurs prior to spray drying. Therefore, it is unclear why Applicant believes that precipitation does occur prior to spray drying. Applicant is invited to provide specific scientific reasoning explaining why the disclosure of Peterson requires spray drying. The arguments are further unconvincing in light of the newly applied art which expressly teaches the avoidance of precipitation prior to spray drying.

Applicant's arguments regarding superior properties of the product of the claimed method are unconvincing because they are unsupported by a showing of evidence, they do not represent a comparison to the closest prior art, and they are not commensurate in scope with the claims (only one of which even requires phosphor particles).

Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cleveland whose telephone number is (703) 308-2331. The examiner can normally be reached on 9-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (703) 308-2333. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 306-3186 for regular communications and (703) 306-3186 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

MBC

MBC
November 17, 2002

SHRIVE P. BECK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700